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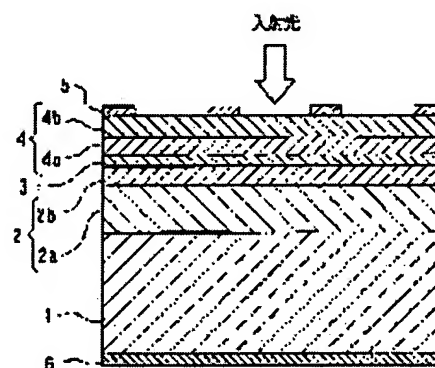
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H01L 31/04(21)Application number : 2001-127742 (71)Applicant : MITSUBISHI MATERIALS SILICON  
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MIZUSHIMA KAZUKI(54) IRON SILICIDE FILM FORMING METHOD, SEMICONDUCTOR WAFER AND OPTICAL  
SEMICONDUCTOR DEVICE

(57)Abstract:

PROBLEM TO BE SOLVED: To provide an iron silicide  
film forming method, a semiconductor wafer and an  
optical semiconductor device for forming a thick  
and continuous  $\beta$ -FeSi<sub>2</sub> film having a good quality.SOLUTION: The method of forming an iron silicide  
film layer 4 or  $\beta$ -FeSi<sub>2</sub> on an Si wafer 1 having a  
crystal plane (001) on the surface comprises an  
SiGe layer forming step of epitaxially growing an  
SiGe layer 2 on the Si wafer, and an iron silicide  
layer forming step of epitaxially growing the iron  
silicide layer on the SiGe layer.

## LEGAL STATUS

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